

CLAIMS

What is claimed is:

1. A telescoping waterway for raising and lowering a firefighting monitor comprising:

5 a hollow outer tube;

an internally-threaded nut positioned at the top of the hollow outer tube; and,

10 a hollow inner tube within the hollow outer tube, the hollow inner tube comprising a threaded outer wall engaging the internally-threaded nut to allow relative movement between the hollow inner tube and the hollow outer tube.

2. The telescoping waterway of claim 1 further comprising:

15 a drive mechanism operably connected to the internally-threaded nut.

3. The telescoping waterway of claim 2 further comprising:

20 a drive motor coupled to the drive mechanism for automatically raising and lowering the hollow inner tube.

4. The telescoping waterway of claim 3, wherein the drive motor is an electric gear motor powered by a fire truck electrical system.

25 5 . The telescoping waterway of claim 2 further comprising:

a hand crank coupled to the drive mechanism for manually raising and lowering the hollow inner tube.

6. The telescoping waterway of claim 2, wherein the hollow outer tube is mounted on a fire truck deck.

7. The telescoping waterway of claim 1 further comprising:

a drive mechanism operably connected to the internally-threaded nut, the drive mechanism comprising a top surface and a bottom surface;

5 a drive motor coupled to the drive mechanism for automatically raising and lowering the hollow inner tube; and,

a hand crank coupled to the drive mechanism for manually raising and lowering the hollow inner tube.

10 8. The telescoping waterway of claim 7, wherein the drive motor is an electric gear motor powered by a fire truck electrical system.

9. The telescoping waterway of claim 7, wherein the hollow outer tube is mounted on a fire truck deck.

15 10. The telescoping waterway of claim 7, wherein the drive motor is mounted either above or below the drive mechanism, and the hand crank is mounted on the other of above or below the drive mechanism.

20 11. The telescoping waterway of claim 7, wherein the drive motor is mounted either on the top surface or the bottom surface of the drive mechanism, and the hand crank is mounted on the other of the top surface or the bottom surface of the drive mechanism.

12. A telescoping waterway for raising and lowering a firefighting monitor comprising:

25 a hollow outer tube;

a hollow inner tube within the hollow outer tube; and,

an actuator that moves the hollow inner tube relative to the hollow outer tube, wherein the hollow inner tube can be maintained in at least one intermediate position between a retracted position and a fully extended position.

13. The telescoping waterway of claim 12, the actuator comprising:
an internally-threaded nut positioned at the top of the hollow outer tube;
a threaded outer wall of the hollow inner tube, wherein the threaded outer
wall engages the internally-threaded nut; and,
5 a drive mechanism operably connected to the internally-threaded nut.

14. The telescoping waterway of claim 13 further comprising:
a drive motor coupled to the drive mechanism for automatically raising and
lowering the hollow inner tube.

- 10 15. The telescoping waterway of claim 14, wherein the drive motor is an
electric gear motor powered by a fire truck electrical system.

- 15 16 . The telescoping waterway of claim 13 further comprising:
a hand crank coupled to the drive mechanism for manually raising and
lowering the hollow inner tube.

17. The telescoping waterway of claim 12, wherein the hollow outer tube is
mounted on a fire truck deck.

- 20 25 18. The telescoping waterway of claim 13 further comprising:
a drive motor coupled to the drive mechanism for automatically raising and
lowering the hollow inner tube; and,
a hand crank coupled to the drive mechanism for manually raising and
lowering the hollow inner tube.

19. The telescoping waterway of claim 18, wherein the drive motor is an
electric gear motor powered by a fire truck electrical system.

20. The telescoping waterway of claim 18, wherein the drive motor is mounted on one side of the drive mechanism, and the hand crank is mounted on the other side of the drive mechanism.

5 21. The telescoping waterway of claim 18, the drive mechanism comprising:

a top surface and a bottom surface, wherein the drive motor is mounted either on the top surface or the bottom surface of the drive mechanism, and the hand crank is mounted on the other of the top surface or the bottom surface of the drive mechanism.

10 22. The telescoping waterway of claim 12, the actuator comprising:

a gear; and,

a toothed portion on the outer wall of the hollow inner tube, wherein the toothed portion engages the gear.

15 23. The telescoping waterway of claim 22 further comprising:

a drive motor coupled to the gear for automatically raising and lowering the hollow inner tube.

24. The telescoping waterway of claim 23, wherein the drive motor is an electric gear motor powered by a fire truck electrical system.

25. The telescoping waterway of claim 22 further comprising:

a hand crank coupled to the gear for manually raising and lowering the hollow inner tube.

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26. The telescoping waterway of claim 22 further comprising:

a drive motor coupled to the gear for automatically raising and lowering the hollow inner tube; and,

a hand crank coupled to the gear for manually raising and lowering the hollow inner tube.

27. The telescoping waterway of claim 26, wherein the drive motor is an
5 electric gear motor powered by a fire truck electrical system.

28. The telescoping waterway of claim 26, wherein the drive motor is mounted on one side of the gear, and the hand crank is mounted on the other side of the gear.